

## NPL Search Results

17/5/1 (Item 1 from file: 60)

DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer

(c) 2009 CSA. All rights reserved.

### **Camera control for third-person console video game**

Baldwin III, William A; Fields, Tim V; Roberts, Erin D; York, James R J, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=74 70195.PN.&OS=pn/7470195&RS=PN/7470195>

RS=PN/7470195

**Document Type:** Patent **Record Type:** Abstract

**Language:** English

In a third-person shooter video game, the viewing perspective is smoothly transitioned between an 'explorer' viewpoint and a 'ready' viewpoint as game conditions change. In the 'explore' viewpoint, scenes are depicted from a **camera** positioned behind and removed from a **character**. The explorer viewpoint offers a wide angle of view of the surrounding combat area, enabling the game **player** to scout the terrain. In the 'ready' viewpoint, scenes are depicted from the **camera** as it is **repositioned** close to the **character**. The ready **viewpoint** provides a narrower angle of view to facilitate better aiming when the **character** is engaged in armed combat. The transition between the explorerr and ready viewpoints tracks a non-linear path.

---

17/5/2 (Item 2 from file: 60)

DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer

(c) 2009 CSA. All rights reserved.

### **Virtual environment navigation**

Gallery, Richard D; Heron, Dale R, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=60 34692.PN.&OS=pn/6034692&RS=PN/6034692>

RS=PN/6034692

**Document Type:** Patent **Record Type:** Abstract

**Language:** English

An interactive entertainment apparatus is provided having means (10,14) for modelling a virtual environment populated by modelled **characters**, with each of the **characters** being controlled by respective rule-based agents. A **camera** control function (58) within the apparatus processor periodically monitors at least one compiled behavior per **character** agent, together with the respective locations within the virtual environment for each of the **characters**. The processor (10) generates clusters of adjacent **characters** within the virtual environment in accordance with predetermined clustering criteria such as relatively proximity and commonality of behavioral characteristics, and generates a respective cluster value derived from the current settings of the monitored behaviors within that cluster. In operation, one cluster is selected in dependence on the derived cluster values and, following determination of the location of that cluster within the virtual environment, the viewpoint from which the image of the virtual environment is rendered is **shifted** to a further **viewpoint** overlooking the selected cluster.

---

23/5/1 (Item 1 from file: 2)

DIALOG(R)File 2: INSPEC

(c) 2009 The IET. All rights reserved.

### **A scheme of inoculation between master of ceremony or player and virtual scene in virtual studio**

**Author(s):** Li Zi-li; Zhu Guang-xi; Zhu Yao-ting

**Author Affiliation:** Dept. of Electron. & Inf. Eng., Huazhong Univ. of Sci. & Technol., Wuhan, China

**Journal:** Journal of China Institute of Communications, vol.24, no.10, pp.102-7

**Publisher:** People's Posts & Telecommun. Publishing House  
**Country of Publication:** China  
**Publication Date:** Oct. 2003  
**Language:** Chinese  
**Document Type:** Journal Paper (JP)

A technical principle about the construction of virtual studio is proposed, where tracker and distance telemeter are used for improving the conventional BETACAM pickup camera and for connecting with the software module of the host. A model of virtual camera, the camera & post-camera coupling pair, is put forward, which has been bound to the real BETACAM pickup camera for shooting the master of ceremonies. The formula is deduced to compute the foreground frame buffer image and the background frame buffer image of the virtual scene whose boundary is based on the depth information of central point of the real BETACAM pickup camera's projective ray. The real-time consistent has been achieved between the video image sequences of the master of ceremonies and the computer graphic (CG) video image sequences for the virtual scene in the spatial position, the projective relationship and the image masking. The experimental result shows that the technological scheme of construction of virtual studio is feasible and effective than the existing technology to establish a virtual studio based on chroma-key and image synthesis with background using nonlinear video editing technique ( 5 refs.)

---

23/5/2 (Item 2 from file: 2)  
DIALOG(R)File 2: INSPEC  
(c) 2009 The IET. All rights reserved.

#### **The Scan&Track virtual environment**

**Author(s):** Semwal, S.K.; Ohya, J.  
**Author Affiliation:** Dept. of Comput. Sci., Colorado Univ., Colorado Springs, CO, USA  
**Book Title:** Virtual Worlds. First International Conference, VW'98. Proceedings  
**Inclusive Page Numbers:** 63-80  
**Publisher:** Springer-Verlag, Berlin  
**Country of Publication:** Germany  
**Publication Date:** 1998  
**Conference Title:** Virtual Worlds First International Conference, VW'98 Proceedings  
**Conference Date:** 1-3 July 1998  
**Conference Location:** Paris, France  
**Editor(s):** Heudin, J.-C.  
**Number of Pages:** xii+412  
**Language:** English  
**Document Type:** Conference Paper (PA)

We are developing the Scan&Track virtual environment (VE) using multiple cameras. The Scan&Track VE is based upon a new method for 3D position estimation called the active-space indexing method. In addition, we have also developed the geometric-imprints algorithm for significant points extraction from multiple camera-images. Together, the geometric-imprints algorithm and the active-space indexing method, provide a promising and elegant solution to several inherent challenges facing camera-based virtual environments. Some of these are: correspondence problem across multiple camera images; discriminating multiple participants in virtual environments; avatars (synthetic actors) representing participants; and occlusion. We also address a fundamental issue: can virtual environments be powerful enough to understand human-participants ( 40 refs.)

---

23/5/4 (Item 2 from file: 60)  
DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer  
(c) 2009 CSA. All rights reserved.

#### **Method, an apparatus and a computer program product for generating an image**

Yasui, Kentarou; Shioikawa, Yosuke; Ikeda, Ryuji . USA  
**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=75 88497.PN.&OS=PN/7588497&RS=PN/7588497>

**Document Type:** Patent    **Record Type:** Abstract  
**Language:** English

When a player character is moved toward a two-dimensional non-player character (NPC) in response to operation of an input section 21 by a player, a main process is repeatedly carried out by a video game apparatus 100. Thus, the two-dimensional NPC approaches the **player character** and is moved toward a visual boundary surface, and finally leaves the field of view of the **virtual camera** without moving within the 2D inhibit **space**. Because the two-dimensional NPC is maintained in a **space** opposite from the **player character** with respect to a boundary surface between 2D and 3D in this way, and the two-dimensional NPC is prevented from moving within the side of the player character P from the boundary surface between 2D and 3D, it is possible to reduce processing load of hardware without losing realism (realistic sensation) when an image including multiple objects is drawn in a virtual three-dimensional space.

---

27/5/2 (Item 2 from file: 8)  
DIALOG(R)File 8: El Compendex(R)  
(c) 2009 Elsevier Eng. Info. Inc. All rights reserved.

#### **Character aspect ratio and design tradeoffs**

Somberg, Benjamin L.

**Corresp. Author/ Affil:** Somberg, Benjamin L.: AT&T Bell Lab. Holmdel, United States

**Editor(s):** Anon

**Conference Title:** Proceedings of the Human Factors Society 34th Annual Meeting - Orlando '90

**Conference Location:** Orlando, FL, USA    **Conference Date:** 19901008-19901012

**Sponsor:** Cent Florida Chapter

**E.I. Conference No.:** 13987

Proceedings of the Human Factors Society ( Proc Hum Factors Soc ) 1990 (1461-1464)

**Publication Date:** 19901201

**Publisher:** Publ by Human Factors Soc Inc

**Document Type:** Conference Paper; Conference Proceeding    **Record Type:** Abstract

**Language:** English    **Summary Language:** English

**Number of References:** 3

The American National Standard for Human Factors Engineering of Visual Display Workstations specifies that **character** height-to-width **ratios** be within the range of 1:0.7 to 1:0.9. The empirical literature, however, fails to provide unequivocal support for that requirement. In designing CRT displays there is a complex interaction among several parameters, including **character** aspect ratio and **character** height. The present study compared a font with a **character** aspect ratio within the range allowed by ANSI/HFS 100-1988 to a font with a **character** aspect ratio outside that range. Using three different visually-intensive tasks, no real performance differences between the two fonts were observed. The study demonstrated that meeting individual design specifications, such as those provided in ANSI/HFS 100-1988, does not necessarily produce the most legible **character** set. It is argued that a performance-based compliance procedure may allow more flexibility in the design of visual display workstations.

---

27/5/10 (Item 1 from file: 60)  
DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer  
(c) 2009 CSA. All rights reserved.

#### **Image processing apparatus and game apparatus**

Oyamada, Hideyuki; Masuda, Ryoosuke , USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Seq1=PTO2&Seq2=HITOFF&u=/netatml/PTO/search-adv.htm&r=1&p=1&l=G&l=50&d=PTXT&S1=75%20314.PN.&OS=PN/7593014&RS=PN/7593014>

**Document Type:** Patent    **Record Type:** Abstract

**Language:** English

An **image processing apparatus** including image creation means (S14) for creating an animated

image of a **character** in accordance with shape data of the **character** (S11) shifting with a predetermined motion in a virtual space, motion data (S12) indicating the predetermined action, and shift amount data (S13) of a shift amount for each of the predetermined actions of the **character**, and reproduction/display means (S16) for displaying the animated images of the **characters** on display means. The **characters** have shapes different in size. The motion data is common to all the **characters**. The shift amount data is set to a shift amount **proportional** to the **character** size. The reproduction/display means changes the reproduction speed (S15) of the animated image of the **character** created by the image creation means, in accordance with the shift amount data of the **character**.

---

27/5/17 (Item 8 from file: 60)

DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer

(c) 2009 CSA. All rights reserved.

**Image regenerating apparatus having improved character resolution and pattern gradation**  
Namizuka, Yoshiyuki; Kamon, Kouichi; Ito, Masaaki; Kawamoto, Hiroyuki; Yoh, Anki; Tone, Takeharu, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5687006.PN.&OS=PN/5687006>

**Document Type:** Patent **Record Type:** Abstract

**Language:** English

In order to realize reduction of product cost without deteriorating quality of a regenerated image, there is provided by the present invention an **image regenerating apparatus** comprising an emphasizing unit for filtering an image for emphasis, a smoothing unit for filtering image for smoothing, an area determinator for determining a **character** area and a photograph area of an image, selecting said emphasizing unit for said **character** area and also selecting said smoothing unit for said photograph area, an image size changing unit for changing size of an image according to a **set** image size changing **ratio**, and a controller for providing control so that said area determinator executes specified selection when an image size changing **ratio set** by said image size changing unit is equal to or larger than a **specified magnification ratio**.

---

27/5/18 (Item 9 from file: 60)

DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer

(c) 2009 CSA. All rights reserved.

**Character image display apparatus for a camera**

Matsumoto, Fumiharu, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5486885.PN.&OS=PN/5486885>

**Document Type:** Patent **Record Type:** Abstract

**Language:** English

A **character image display apparatus** in a film device with a lens mounted thereon or a **camera** is constructed such that a hole is provided on a reflector in a flash unit provided on a body of the **camera**, one end of a photoconductor is fixed to the hole and the other end thereof is connected to a diffusion block disposed so as to face an exposure window on the body, and a **display device** in which a positive film of a display image such as a **character** image stuck on a plane of the diffusion block is disposed in front of a film in **fixed relationship** to a shading corrugation within an exposure portion of the **camera** body, whereby when photographing is performed, a light ray from the flash unit is introduced by the photoconductor and a display image such as a **character** mark is simultaneously exposed simultaneously exposed as a part of a photographing image with light rays uniformed by the diffusion block.

---

27/5/22 (Item 13 from file: 60)

DIALOG(R) File 60: ANTE: Abstracts in New Tech & Engineer  
(c) 2009 CSA. All rights reserved.

**System and method for composing a display frame of multiple layered graphic sprites**

Blossom, Jon; Edwards, Michael, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5892521.PN.&OS=pn/5892521&RS=PN/5892521>

Document Type: Patent

Record Type: Abstract

Language: English

A data processing apparatus includes a graphics **display device** for displaying a display frame comprising a plurality of display frame pixels. A **sprite** management system composes the display frame from a plurality of graphic **sprites**. Each graphic **sprite** comprises a plurality of **sprite** pixels and corresponding **sprite** pixel values. Each **sprite** has a **specified depth relative** to the other **sprites**. One of the **sprites** is designated to be a video **sprite**. This **sprite** is loaded with a chroma-key value. The **sprite** management system includes a data processing device connected to access a display frame composition buffer. The data processing device is programmed to write pixel values of individual **sprites** to the display frame composition buffer. This writing begins with the pixel values of the **sprite** having the greatest depth and proceeds with the pixel values of the remaining **sprites** in order of decreasing **sprite** depth. The display frame data is then passed to a video overlay board which overlays a video image over those pixels containing the chroma-key value. The result is a display frame in which the plurality of graphic **sprites**, including the video **sprite**, appear layered with respect to each other in accordance with their respectively specified depths.

---

30/5/1 (Item 1 from file: 60)

DIALOG(R) File 60: ANTE: Abstracts in New Tech & Engineer  
(c) 2009 CSA. All rights reserved.

**Image displaying system for interactively changing the positions of a view vector and a viewpoint in a 3-dimensional space**

Horluchi, Kazu; Nishimura, Kenji; Nakase, Yoshimori, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5325472.PN.&OS=pn/5325472&RS=PN/5325472>

Document Type: Patent

Record Type: Abstract

Language: English

An image displaying system interactively changes the positions of the view vector and the viewpoint in the 3-dimensional space of a camera model which displays an object geometric model, constructed within a computer, on the screen in the computer assisted design (CAD) and science art simulation field. The user inputs the object point and the target point on the display screen showing the viewpoint and the view vector direction so as to effect the screen display of the scene with the positions of the view vector and the viewpoint in the 3-dimensional space of the camera model for displaying on the screen the object geometric model constructed within the computer. The scene with the viewpoint and the view vector direction being interactively changed is displayed on the screen.

---

12/3/K/1 (Item 1 from file: 275)

DIALOG(R) File 275: Gale Group Computer DB(TM)  
(c) 2009 Gale/Cengage. All rights reserved.

**Unreal tournament for immersive interactive theater.**

Jacobson, Jeffrey; Hwang, Zimmy

Communications of the ACM, 45, 1, 39(4)

Jan., 2002

Language: English

Record Type: Fulltext

Word Count: 1699

Line Count: 00133

the operator's player. In UT, one can join a game as a spectator, which is a bodiless camera, which in this case follows the **player** around in the virtual world. Setting one more option makes the spectator see exactly what a **player** is seeing. Actually, it is just a **virtual camera** or **viewpoint** in the virtual world that is always located in exactly the same place as the **player's** camera.

For each projector machine, the CaveUT modifications in the game code turn the spectator's **viewpoint** by a certain amount. The exact rotation needed for each screen depends on where it is located and the overall geometry of the immersive theater...

---

12/3,K/2 (Item 1 from file: 15)  
DIALOG(R)File 15: ABI/Inform(R)  
(c) 2009 ProQuest Info&Learning. All rights reserved.

#### **The virtual reality modeling language and Java**

Brutzman, Don  
Communications of the ACM v41n6 pp: 57-64  
Jun 1998  
**Word Count:** 4585

sounds at different locations within a scene can produce dramatic results. Viewing. Most 3D nodes describe location, size, shape and appearance of a model. The **Viewpoint** node specifies position, orientation and field of view for the **virtual camera** that is used to view (i.e., calculate) the 3D scene and render the screen image. Most objects and scenes contain a number of named **viewpoints** to encourage easy user navigation. The NavigationInfo node extends the camera concept to include the notion of an **Avatar** bounding box, used to determine camerato-object collision and height of eye when "gravity" (terrain following) is enabled. NavigationInfo also toggles a "headlight" in the...

---

17/3,K/2 (Item 1 from file: 621)  
DIALOG(R)File 621: Gale Group New Prod.Annou.(R)  
(c) 2009 Gale/Cengage. All rights reserved.

#### **The Hunt Is On! Hunting Unlimited(R) 2 Now Shipping; Sequel to the 2001 Hit Features Photo-Realistic Environments and Amazingly Realistic Animal Behaviors Making This the Most Authentic and Beautiful Hunting Game Ever.**

PR Newswire , p NA  
Sept 30 , 2003  
**Language:** English **Record Type:** Fulltext  
**Document Type:** Newswire ; Trade  
**Word Count:** 734

hunting environments. Plus, hunters can use the target range to perfect their aim, ensuring their 3D Trophy Room will be stocked with high-scoring trophies.

**Players** can play in both first person and third person **viewpoints**, moving their character through incredibly realistic environments with trees that sway in the wind, changing time of day, amazing shadows, photo-realistic textures, lush grass and ground vegetation. There is even the visually stunning "Bulletcam" view that gives an adrenaline-packed bullets-eye-view of perfectly, or not so perfectly, placed shots. When **players** make a "kill shot" they will see an amazingly real animation of the animal after it was hit – more authentic than any hunting game to date. The game also gives the **player** more control over **camera** positions, scopes and binocular zooming qualities, plus easier control over the inventory and hunting actions.

"Hunting Unlimited(R) 2 takes all the great excitement and...

---

17/3,K/3 (Item 2 from file: 621)  
DIALOG(R)File 621: Gale Group New Prod.Annou.(R)  
(c) 2009 Gale/Cengage. All rights reserved.

#### **COREL AND TERRY BRADSHAW TEAM UP FOR NEW CD FOOTBALL GAME**

PR Newswire , p 0703NYW079

July 3 , 1996

Language: English    **Record Type:** Fulltext

**Document Type:** Newswire ; Trade

**Word Count:** 513

this Fall. With the most realistic high-resolution 3D football field seen in any CD game to date, this game features a free-floating 3D **camera** which automatically **follows** the gridiron. The **player's viewpoint**, seen through the eyes of the 3D **camera**, gives the **player** the sensation of actually being on the football field.

Upon starting the game, the **player** can choose to play against another **player** or against the computer. He can then choose a play, move the quarterback around using either a joystick, mouse or keyboard, then run or throw by pressing another key. All **players** run at different speeds based on their actual running speed. The game includes regular season and playoff action.

Troy Lyndon, Chief Executive Officer of Studio...

---

17/3,K/5 (Item 1 from file: 15)

DIALOG(R)File 15: ABI/Inform(R)

(c) 2009 ProQuest Info&Learning. All rights reserved.

#### **Research & innovation: New dimensions for games**

Johnstone, Bob

Far Eastern Economic Review    v156n37 pp: 60

Sep 16, 1993

**Word Count:** 851

a scantily clad waif described as "a 19-year-old special-operations attache" from Britain. But well-drawn and colourful though they may be, the **characters** in Street Fighter II inhabit a purely flat Earth. They lunge and jump, but they cannot make use of the third dimension, depth. Contenders in... ..real fighters would, because they are based on films of people. And while Street Fighter II is always seen from head-on, Virtua Fighting's **viewpoint shifts** as though its scenes were filmed by a mobile **camera**. Such realistic effects make it possible for **players** to forget that the fighters in Virtua Fighting are composed of dozens of hard-edged polygons. Their faces are particularly crude, with simple cores used...

---

23/3,K/1 (Item 1 from file: 275)

DIALOG(R)File 275: Gale Group Computer DB(TM)

(c) 2009 Gale/Cengage. All rights reserved.

#### **Digital Film Fest.(D. Film film showcase inspires digital film making)(Technology Information)**

Tyrka, Katherine

Computer Graphics World , 22 , 10 , 56

Oct , 1999

Language: English    **Record Type:** Fulltext

**Word Count:** 277    **Line Count:** 00025

presentation of digitally produced shorts. Among the highlights were: "Ghostcatching" featuring dancers created from motion capture pulled from photographs of dancer Bill T. Jones; "Pelucid Spaces," showing artificial-life programs that create "**characters**" in front of a **virtual camera**; and "Millennium Bug" a surrealist's peek at the future of urban sprawl.

Besides its stop at Cannes, the festival is traveling to more than...

---

23/3,K/2 (Item 2 from file: 275)

DIALOG(R)File 275: Gale Group Computer DB(TM)

(c) 2009 Gale/Cengage. All rights reserved.

#### **MIXED MEDIA.(DreamWorks uses custom software to create 'Prince of Egypt')(Technology**

**Information)**

ROBERTSON, BARBARA

Computer Graphics World , 21 , 12 , 32(1)

Dec , 1998

**Language:** English      **Record Type:** Fulltext; Abstract

**Word Count:** 2133      **Line Count:** 00162

camera in three-space within an animated feature film was in the ballroom scene in Disney's Beauty and the Beast (1991), and 3D objects, **characters**, and sets have been used in many animated features since. But with Prince of Egypt, an animated musical based on the story of Moses that...

---

26/3,K/1 (Item 1 from file: 275)

DIALOG(R)File 275: Gale Group Computer DB(TM)

(c) 2009 Gale/Cengage. All rights reserved.

**Beasts of Eden: in Dinotopia, live-action humans and digital dinosaurs live together in harmony.**

Moltenbrey, Karen

Computer Graphics World , 25 , 6 , 22(5)

June , 2002

**Language:** English      **Record Type:** Fulltext

**Word Count:** 2466      **Line Count:** 00201

of the cycle, so they were easily accessible through a shared networked environment, helping to speed the compositing process. By integrating the 2D and 3D **cameras** into the production pipeline, the team was also able to mix and match the **cameras** while compiling the final scenes, enabling the artists to achieve the optimal **viewpoint** for a **particular** shot.

**Epic Proportions**

All told, FrameStore-CFC generated visual effects for 273 off the 336 scenes in the production--the scope of which Knox likens to that required...

...you have real architecture and real actors next to digital elements and creatures, so your sense of reality has to be exact in terms of **character** movement, weight, scale, shadowing, and lighting," he says.

Having just completed the miniseries, FrameStore-CFC is already working on the first episodes for a 22...